

Work Order ID 60522

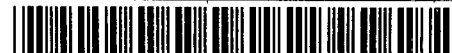
Tuesday, July 13, 2010 11:27:46 AM



Page 1

Item ID: D212-664-101

Accept



Setup Start



Revision ID:

Stop



Item Name: Crosstube Fwd

Start Date: 7/13/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 7/26/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: Date: 10-7-13 Tooling: Date:
QC: Date: SPC (Y/N): Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D212-664-141	Rev D
--------------	-------

100



DC

Document Control

DOCUMENT CONTROL

0.00

Memo

0.00

Photocopy bluefile and create labels as per PPP D212-664-101 CHG003

5 w/ 10/8/05

Ag for BG 10/08/05

110



Packaging

Packaging

Pick Kit
Packaging

0.00

Memo

0.00

(IX) MB 10-07-26

120



CNC Bend 2

CNC Alpha 160 Bender

BENDING MACHINE - CROSSTUBES

0.00

Memo

0.00

Bend tube as per Dwg D212-664-141 using CNC bender program 212-fw and Folio D212-664-101

(IX) MB 10-07-26

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60522

Tuesday, July 13, 2010 11:27:46 AM

Page 2

Item ID: D212-664-101

Accept

Setup Start

Revision ID:

Stop

Item Name: Crosstube Fwd

Start Date: 7/13/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 7/26/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC15- Crosstube Dimensional Check

0.00

QC

Memo

0.00

Quality Control

140

Crosstubes

0.00

Crosstubes

Memo

0.00

Crosstubes

1-Drill pilot holes in tube as per Dwg D212-664-141 using drill Jig DT8548 & DT8549, using drill table DT8577, set-up towers in hole #7 as per QSI 10

2-Ream hole to finish size in tube as per Dwg D212-664-141 using drill Jig DT8548 & DT8549. Check dimensions between holes, both sides on both cuffs, to ensure alignment with saddle holes.

3-Scribe part # and batch # using vibrating stylus as per Dwg D212-664-141

4-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-141

MB
10-07-27
A W M
-10-07-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150



HandFXtube

Crosstubes Chemical Conversion

0.00

Memo

0.00

Hand Finishing Crosstubes

Chemical Conversion Coat within 24 hours of bending and drilling

1 - - AWM
10-07-28

160



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Sulorbe

②

170



Outsource2

Outsource process - NDT

Outsource process - NDT per QSI038 4.1

0.00

Memo

0.00

Liquid Penetrant Inspection as per QSI 038
Issue P/O: 12352
LPI as per ASTM 1417 Level 2
Attach copy of NDT results to work order

PS10-730

①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 4

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Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

180



Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs
Packaging

0.00

Memo

0.00

Ensure copy of NDT results attached to work order.

190



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Inspect for damage & ensure results are as per Dwg D212-664-141

_____ 10/8/3 (C)

ml 10 08 03 (C)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Start Date: 7/13/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 7/26/2010 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	Spray Painting per QSI005 4.2	0.00							
	SprayPaint					<u>M</u>	<u>10</u>	<u>08</u>	<u>03</u> (J)
	Memo	0.00							
	1-Prime inside and outside crosstube as per QSI 005 4.2								
	2-Paint outside crosstube with White Imron as per QSI 005 4.2								
	PRIME:								
	Start Time: <u>9:00</u>								
	Finish Time: <u>10:00</u>								
	PAINT:								
	Start Time: <u>1:30</u>								
	Finish Time: <u>3:00</u>								
210	QC14- Inspect Spray Paint	0.00							
	QC								
	Memo	0.00							
	Then, Wrap in plastic bag to protect from scratches								
	Quality Control								

BT 10-08-04 (K)

W/O:		WORK ORDER CHANGES					
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Work Order ID 60522

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Item ID: D212-664-101

Accept

Setup Start

Revision ID:

Stop

Item Name: Crosstube Fwd

Start Date: 7/13/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 7/26/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start

Approvals: Process Plan: Date: Tooling: Date:

Stop

QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	Crosstubes	0.00							
	Crosstubes								
	Crosstubes								
	Memo	0.00							
	1- Lightly scuff the bonded area using a 320 grit sand paper and clean the area with 41058 wash 'n' wipe								
	2-Install supports with magnobond as per QSI 015 Adhere for for 12 Hrs								
	A/R 6398 Magnobond Batch: 114158 07/20/11								
	Torque: ml 10 08:05 ①								
230	QC5- Inspect part completeness to step on W/O	0.00							
	QC								
	Quality Control								
	Memo	0.00							
240	Pick Kit	0.00							
	Packaging								
	Packaging								
	Memo	0.00							

ml 10 08 04 ①

810/08/05

①

10/8/5 sf

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 60522

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Item ID: D212-664-101

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Setup Start

Revision ID:

Stop

Item Name: Crosstube Fwd

Start Date: 7/13/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 7/26/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

250

QC4- 100% Inspect kits for completeness

0.00

S10108105



QC

Memo

0.00

Quality Control

260

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D212-664-101

MEU R

270

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/08/06
ME
10-8-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, July 13, 2010 11:27:50 AM

Page 1

Work Order ID: 60522

Parent Item: D212-664-101

Parent Item Name: Crosstube Fwd



Start Date: 7/13/2010

Required Date: 7/26/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:E 04.02.16 Reformat KJ/DS
IPP Rev:F 06-03-29 Remove Coments on Pick List JLM
IPP Rev:G 07-04-30 As per Rev C JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D212-664-101TRN Manufactured No

110

Each

2.0000

1

1



Crosstube Turning Detail



MB 10-07-22

Location

Loc Qty

Loc Code

LG

2

59977

1

59978

1

D3595-063-450

Manufactured No

230

Each

50.7590

4

4.210526



RUBBER CUSHION



IX

Location

Loc Qty

Loc Code

LG

50.75897368

53775

5.97897368

58161

7.78

59580

37

ml 10 08 04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

Tuesday, July 13, 2010 11:27:50 AM

Page 2

Work Order ID: 60522

Parent Item: D212-664-101

Parent Item Name: Crosstube Fwd

MS21920-25



Clamp(per MIL-DTL-8783C)

Purchased

No

220

Each

106.0000

4

4

Start Date: 7/13/2010

Required Date: 7/26/2010

Start Qty: 1.00

Required Qty: 1.00

Location

Loc Qty

Loc Code

LG

63

113281

0

114759

38

114901

25

ST451

43

113281

5

113282

18

113744

1

114141

19

D2893-1



2.75 Support

Manufactured

No

220

Each

30.0000

2

2

Location

Loc Qty

Loc Code

LG

30

53340

2

53774

8

56354

20

D3428-1



Placard

Manufactured

No

240

Each

8.0000

1

1

Location

Loc Qty

Loc Code

ST056

8

60133

8

AN6-35A



BOLT

Purchased

No

240

Each

0.0000

4

4

ml 10.08.04

ml 10.08.04

10/8/58

M113204 10/8/58

Tuesday, July 13, 2010 11:27:50 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

Page 3

Tuesday, July 13, 2010 11:27:50 AM

Work Order ID: 60522

Parent Item: D212-664-101

Parent Item Name: Crosstube Fwd

Start Date: 7/13/2010

Required Date: 7/26/2010

Start Qty: 1.00

Required Qty: 1.00

AN6-36A

Purchased

No

240

Each

80.0000

4

4



Bolt



10/8/5 sl

Location

Loc Qty

Loc Code

ST343

80

114330

30

115016

50

9

MS21042L6

Purchased

No

240

Each

204.0000

6

6



Nut



10/8/5 sl

Location

Loc Qty

Loc Code

ST300

204

111578

4

114495

200

6

AN960JD616

NAS1149D0663J

Purchased

No

240

Each

0.0000

18

18



Washer



1114988 10/8/5 sl

Tuesday, July 13, 2010 11:27:50 AM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

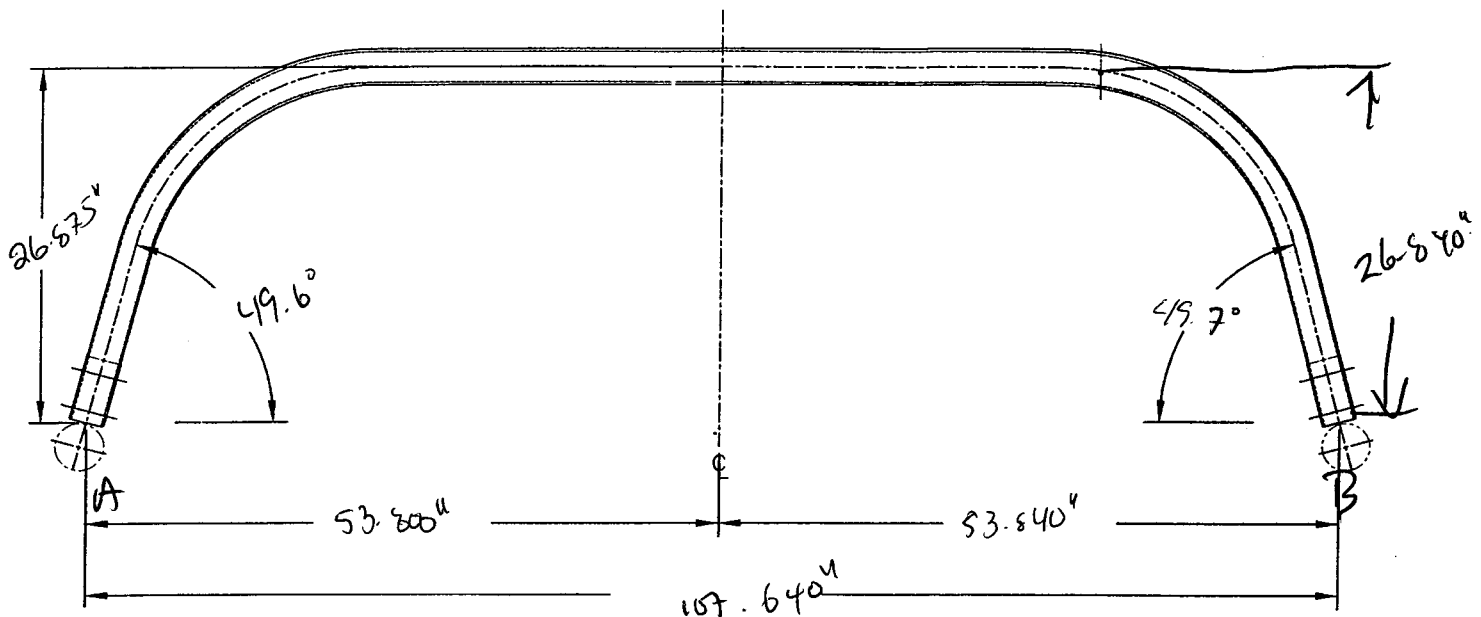
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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	60522
Description: Crosstube High Fwd. (205/212/412)		Part Number:	D212-664-101
Inspection Dwg: D212-664-141 Rev: D		Page 1 of 1	

Required Dimension	Min	Max
Height	26.79	27.05
1/2 Span	53.59	53.85
Angle	49	52
Total Span	107.18	107.7



Comments

QC15 Inspection	C
Date	10/07/20

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	
B	07.05.31	Dimensions updated per Dwg Rev C	KJ/JM	
C	10.04.01	Dwg Rev updated	KJ	

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Item	Qty -141	Qty -141B	Part Number	Description
1	X		D212-664-141	CROSSTUBE ASSEMBLY (205/212/412 HIGH FWD)
2		X	D212-664-141B	CROSSTUBE ASSEMBLY (214 HIGH FWD)
3	1	1	D6005-128	CROSSTUBE
4	2	2	D2893-1	SUPPORT
5	4	4	D3595-063-450	RUBBER CUSHION
6	4	4	MS21920-25	CLAMP (OR MS21920-26)
7	A/R	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6005-128
FINISHED LENGTH = 126.514±0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D212-664-XXX" AND BATCH NUMBER ON INSIDE OF CUFF
USING VIBRATING STYLUS
- 7) WEIGHT: D212-664-141 = 33.6 lbs (PER IIN-D212-664)
D212-664-141B = 33.6 lbs (PER IIN-D212-664)
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART. BLEND OUT EDGE LONGITUDINALLY. TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 3 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS
6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2893-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF
D2893-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER
INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-25 CLAMPS (OR -26) WITH D3595-063-450 RUBBER CUSHIONS TO SECURE THE D2893-1
SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE
SUPPORT.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE
SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR
DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND
MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT
HAS NOT BOTTOMED-OUT AFTER TORQUING.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 00522
pl 10-713

RELEASED
2009-10-29
MT

D	REFORMAT/REVISE GENERAL NOTES/PART LIST; REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS; ADD -141B (ZN B4-2, D4-2); REMOVED REF & ADD TOLERANCES (ZN B4-3, C6-3, C8-3 & B6-3); RELOCATED FLAG #6 PER PAR 08-046 (ZN A5-3); MOVED TURNING DETAIL & UPDATED TOLERANCE TO SHEET 4	RF	09.09.30
C	REMOVE -851 ABRASION STRIP; ADD MAGNOBOND 6398, CUSHION, REVERSE CLAMPS	PH	07.03.08
B	ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	PH	05.02.04
A	NEW ISSUE	PH	00.12.12
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>PH</i>	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>Q</i>	DRAWING NO.	REV. D
MFG. APPR.	<i>DS</i>	D212-664-141	SHEET 1 OF 4
APPROVED	<i>MD</i>	TITLE	SCALE
DE APPR.	<i>11</i>	XTUBE ASS'Y (205/212/412 HI FWD)	NTS
DATE	09.09.30	COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

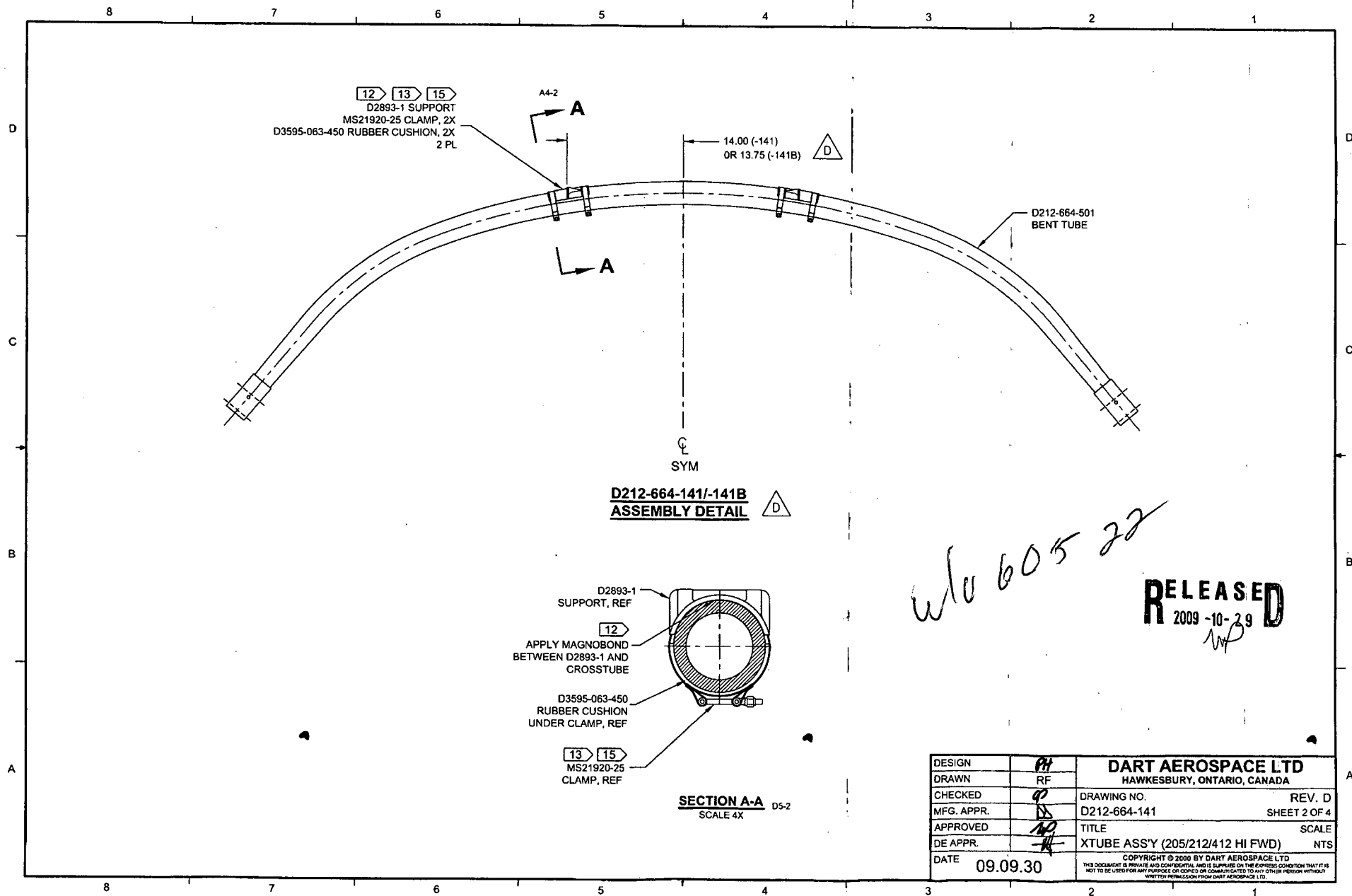
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	PH	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	Q	DRAWING NO.	REV. D
MFG. APPR.	B	D212-664-141	SHEET 2 OF 4
APPROVED	10	TITLE	SCALE
DE APPR.	H	XTUBE ASS'Y (205/212/412 HI FWD)	NTS
DATE	09.09.30	<small>COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

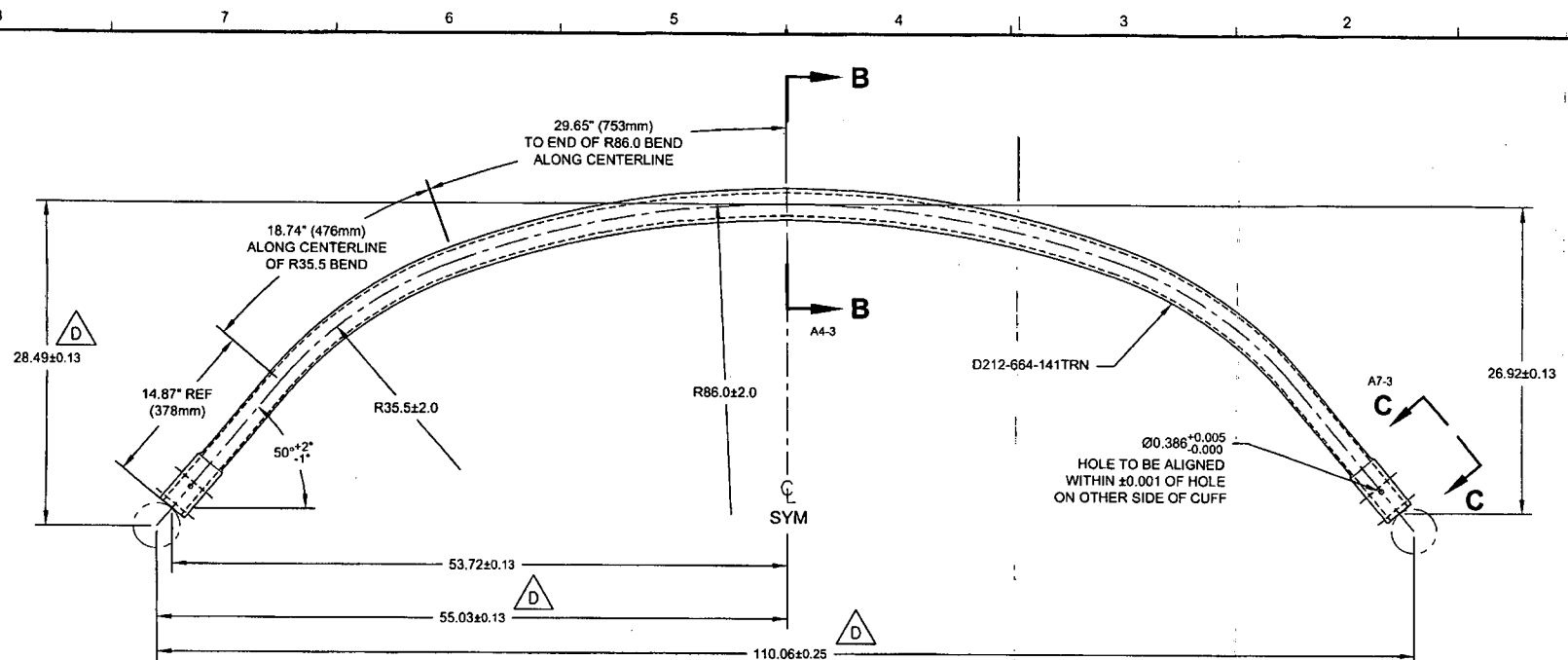
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

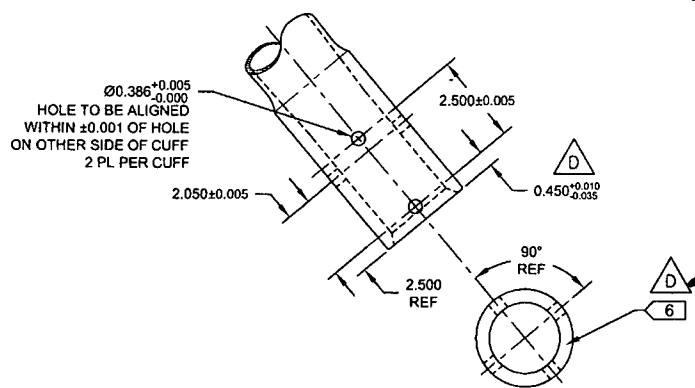
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

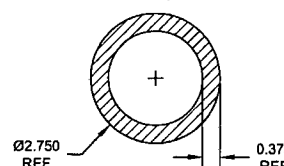


D212-664-501
BENDING AND DRILLING DETAIL

10



VIEW C-C: CUFF DETAIL
SCALE 3X



SECTION B-B
SCALE 4X

w/0 60522

RELEASED
2009-10-29

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	Q	DRAWING NO.	REV. D
MFG. APPR.	AS	D212-664-141	SHEET 3 OF 4
APPROVED	AP	TITLE	SCALE
DE APPR.	ST	XTUBE ASS'Y (205/212/412 HI FWD)	NTS
DATE	09.09.30	<small>COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

WORK ORDER CHANGES

W/O:							
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

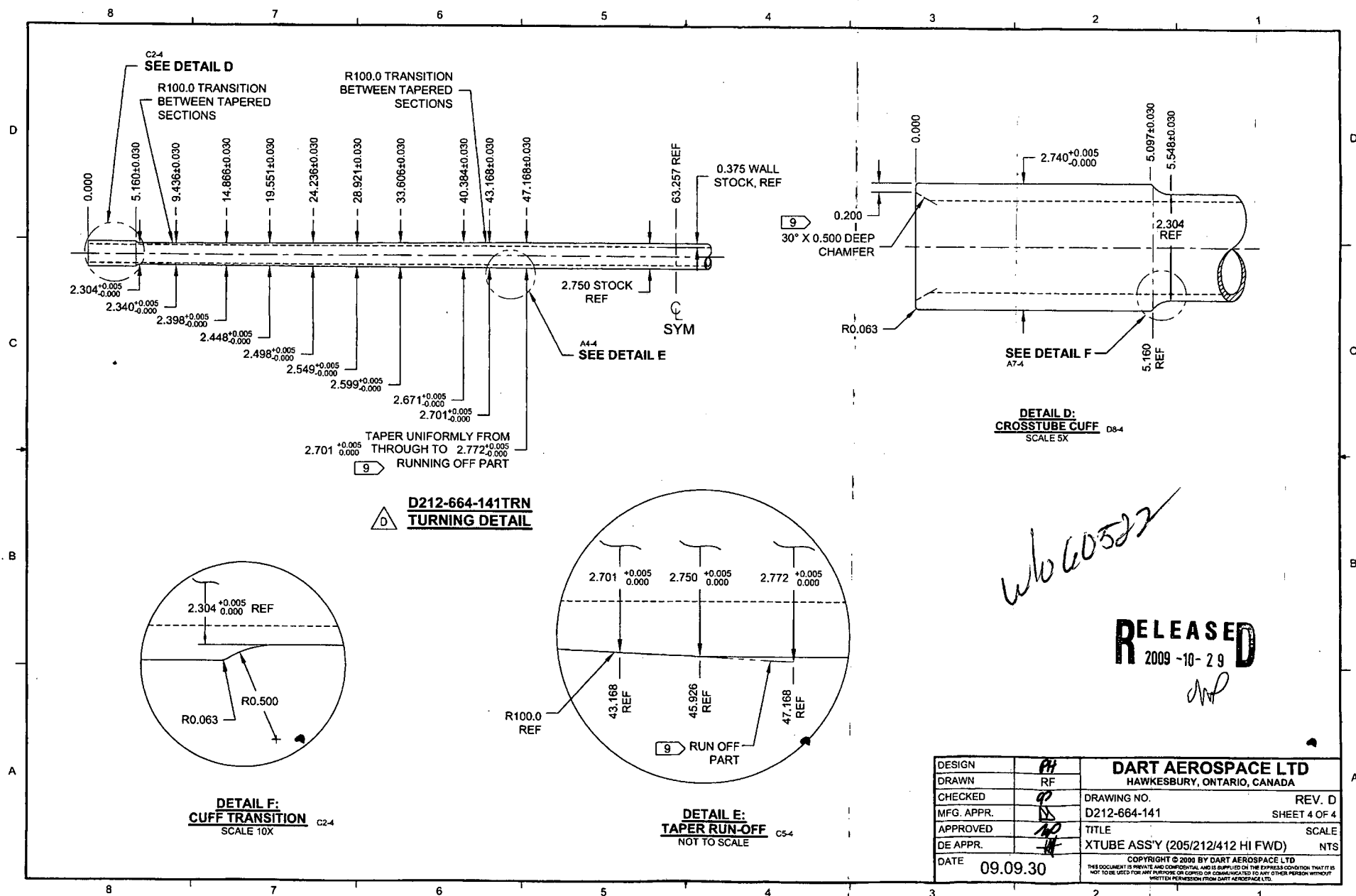
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

WORK ORDER NON-CONFORMANCE (NCR)

NCR:								
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



LIQUID PENETRANT TEST REPORT

P- 15185

PAGE 1 OF 1

CLIENT DART AEROSPACE DATE July 30, 2010 TIME AM ☒ PM ☐
ATTENTION LINDA /CHANTEL ACUREN JOB NO. 188-10-0814
ADDRESS 1270 ABERDEEN STREET. PO/WO NO. 12352
HAWKES BURY ON. WORK LOCATION HAWKES BURY PLANT.
K&H 1K7 ACCEPTANCE STD. ASTM 1417 REV./DATE 2007
PROJECT F.P. I, ON CROSS TUBES
ITEM(S) EXAMINED 4 PCS.

JOB DESCRIPTION _____ PROCEDURE NO. LT-0002 REV./DATE _____ TECHNIQUE NO. LT-0002 REV./DATE _____
PART NO. _____ MATERIAL ALUMINE ALUMINUM THICKNESS _____
SCOPE WET FLOUORESCENT LIQUID PENETRANT
INSPECTION CARRIED OUT 100% EXTERNAL

TEST DETAILS
METHOD ☒ FLUORESCENT ☐ VISIBLE ☒ WATER WASH ☐ SOLVENT REMOVABLE ☐ POST EMULSIFIED
FAMILY BRAND MAGNAFLUX BLACK LIGHT S/N 16459 ☐ OUTPUT > 1000 μ W/cm² ☐ AMBIENT < 2 fc
PENETRANT 2L 67 MINIMUM DWELL TIME 450 MIN. LIGHTING EQUIP. ☐ FLASHLIGHT ☐ TROUBLELIGHT ☐ OUTPUT > 100 fc @ SURFACE
PENETRANT REMOVER H2O MINIMUM DRY TIME >10 MIN. OTHER LABINO
DEVELOPER SKD 52 MINIMUM DWELL TIME 10 MIN. LIGHT METER S/N 1098866 CAL DUE DATE 06-19
DEVELOPER TYPE ☐ NON AQUEOUS ☐ AQUEOUS ☐ DRY 2010

TEST SURFACE
SURFACE CONDITION ☐ AS GROUND ☐ AS WELDED ☐ MACHINED ☐ SHOT BLASTED ☒ CLEAN BARE METAL
SURFACE TEMPERATURE ☐ < -4°C/ 20°F ☐ -4°C/ 20°F TO 10°C/ 50°F ☒ 10°C/ 50°F TO 52°C/ 125°F ☐ > 52°C/ 125°F

RESULTS- (☐ METRIC ☐ IMPERIAL)
1 CROSS TUBE, W.O. 60526 ✓
1 CROSS TUBE, W.O. 60525 ✓
1 CROSS TUBE, W.O. 60521 ✓
1 CROSS TUBE, W.O. 60522 ✓
10 08 03

Scope of Services
The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

Standard of Care
In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES
CLIENT REPRESENTATIVE Linda Chantel DTR # E63374
TECHNICIAN (SIGNATURE): Mike Johnston REPORT REVIEWED BY:
NAME (PRINT): Mike Johnston NAME INITIALS
CGSB LEVEL 1 SNT LEVEL _____ CGSB LEVEL _____ SNT LEVEL _____
CGSB REG. NO. 6606 CGSB REG. NO. _____

ASAP 6

Work Order ID 64541

December 21, 2010 2:30:23 PM



Page 1

Item ID: D212-664-101

Accept



Setup Start



Revision ID:

Stop



Item Name: Crosstube Fwd

Start Date: 12/08/10 Start Qty: 1.00



Cust Item ID:

Required Date: 12/09/10 Req'd Qty: 1.00

Customer: CU-DAR001

Reference: RMA RA110139 **+REWORK**

Approvals: Process Plan: *[Signature]*

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D212-664-141	Rev D
--------------	-------

100

0.00



QC

Memo

0.00

Quality Control

INSPECT RA110139
D212-664-101 B60522

See RMA & UCR report.

11-01-06

110

0.00



Crosstubes

Crosstubes

Memo

0.00

-BUFF CORROSION
-ACID ETCH AND ALODINE
-RE-PRIME UNDER SUPPORTS, REINSTALL SUPPORTS

allow primer to dry for 4 hrs min then assemble

0.00

11-1-06

11-01-10

115



Packaging

Packaging

Memo

0.00

PACKAGE - RETURN TO CUSTOMER

*Outsource
LPI per JST*

PD 13250

*C 11/10/11
C 11/10/11 (X)
C 11/1/11 C*

L 116 -> QCS

Sulali

(X)

W/O: 64541		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
10-01-10	110	prime inside of original supports leave exterior s/s	ET	10-01-10	x2	h 11-01-11	S 11/01/11	
11-01-10	110	install new clamps MS21920-25 x4 install new rubber strips D3595-063-450	B M 115849 B 63960	ET	11-01-10	h 11-01-11	S 11/01/11	

Part No: D212-664-101 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 64541

December 21, 2010 2:30:23 PM

Page 2

Item ID: D212-664-101

Accept

Revision ID:

Item Name: Crosstube Fwd

Start Date: 12/08/10 Start Qty: 1.00

Required Date: 12/09/10 Req'd Qty: 1.00

Reference: RMA RA110139

Cust Item ID:

Customer: CU-DAR001

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/01/12

A 18-01-14

L Lacelle

From: Bill Beckett [bbeckett@dartaero.com]
Sent: December 20, 2010 12:55 PM
To: 'Peggy McDonald'; swillems@dartaero.com; 'L Lacelle'
Cc: 'Marc Bellavance'; Jason Murdoch; 'Stow, Dan'; Susanne Sheldon; 'Mike Petsche'; 'David Shepherd'
Subject: RE: Crosstube corrosion from Expedition

Peggy – ok, this is fine.

Sian – no-charge on a CSR. Please indicate ship date (talk to LL).

Linda – pls prepare work order **NB – no priming!** Ensure interior is protected during etch and alodine.

Bill

From: Peggy McDonald [mailto:peggy@darths.com]
Sent: December 20, 2010 12:48 PM
To: Bill Beckett
Cc: Marc Bellavance
Subject: Crosstube corrosion from Expedition
Importance: High

*- Buff corrosion
 - acid etch
 - alodine
 - reassemble, prime under supports*

Hi Bill,

I spoke with Expedition this morning about the crosstube corrosion issue.

To resolve the issue, I took your recommendation and offered the crosstube rework at no charge.
 (removal of the surface corrosion, acid etch and alodine)

PLEASE NOTE : the customer will do their own priming right before paint.

These can be returned to them early in the new year.
 I recommend a MISC no charge PO to be sent to DAS.
 Freight will be on the DHS account.

Please advise how you would like DHS to proceed.

Peggy

*64541
 547
 60522
 60450*

**PLEASE NOTE OUR NEW CORPORATE OFFICE ADDRESS: 4650 North Avenue, Oceanside,
 California 92056**

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12/20/10

Work Order ID 64541

December 8, 2010 8:52:04 AM



Page 1

Item ID: D212-664-101

Accept



Setup Start



Revision ID:

Stop



Item Name: Crosstube Fwd

Start Date: 12/08/10 Start Qty: 1.00



Cust Item ID:

Required Date: 12/09/10 Req'd Qty: 1.00



Customer: CU-DAR001

Reference: RMA RA110139

Approvals: Process Plan: 

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D212-664-141

Rev D

100

0.00



QC

Memo

0.00

Quality Control

INSPECT RA110139

110

0.00

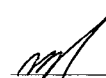



Crosstubes

Memo

0.00

Crosstubes

 10 12 08 ①

Verified by:  10/12/08

Work Order ID 64541

Page 2

December 8, 2010 8:52:04 AM

Item ID: D212-664-101

Accept



Setup Start



Revision ID:

Stop



Item Name: Crosstube Fwd

Start Date: 12/08/10 Start Qty: 1.00



Cust Item ID:

Required Date: 12/09/10 Req'd Qty: 1.00



Customer: CU-DAR001

Reference: RMA RA110139

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC21 - Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control



LIQUID PENETRANT TEST REPORT

P- 15201

CLIENT	DART Aerospace	DATE	JAN. 10. 2011	PAGE	1	OF	1	
ATTENTION	LINDA LACELLE	ACUREN JOB NO.	188-11-2008	TIME	AM	<input checked="" type="checkbox"/>	PM	<input type="checkbox"/>
ADDRESS	1270 ABERDEEN ST HAWKESBURY, ON.	PO/VO No.		WORK LOCATION	Hawkesbury Plant			
PROJECT	F.P. I.	ACCEPTANCE STD.	ASTM 1417	REV./DATE	2005			
ITEM(S) EXAMINED	6 CROSS TUBES 2 ENGINE MOUNTS							

JOB DESCRIPTION	PROCEDURE No. LT-002	REV./DATE	2008	TECHNIQUE No. LT-002	REV./DATE	2008
PART NO.	MATERIAL ALUMINUM THICKNESS VARIOUS					
SCOPE	WET FLUORESCENT LIQUID PENETRANT INSPECTION COPIED OUT 100% EXTERNAL					

TEST DETAILS	
METHOD	<input checked="" type="checkbox"/> FLUORESCENT <input type="checkbox"/> VISIBLE
FAMILY BRAND	MAINT FLUX
PENETRANT	2 LG 7 MINIMUM DWELL TIME 45 10 MIN.
PENETRANT REMOVER	H2O MINIMUM DRY TIME >10 MIN.
DEVELOPER	SDS2 MINIMUM DWELL TIME 10 MIN.
DEVELOPER TYPE	<input checked="" type="checkbox"/> NON AQUEOUS <input type="checkbox"/> AQUEOUS <input type="checkbox"/> DRY
TEST SURFACE	

SURFACE CONDITION	<input type="checkbox"/> AS GROUND <input type="checkbox"/> AS WELDED <input type="checkbox"/> MACHINED <input type="checkbox"/> SHOT BLASTED <input type="checkbox"/> CLEAN BARE METAL
SURFACE TEMPERATURE	<input type="checkbox"/> < -4°C/ 20°F <input type="checkbox"/> -4°C/ 20°F TO 10°C/ 50°F <input type="checkbox"/> 10°C/ 50°F TO 52°C/ 125°F <input type="checkbox"/> > 52°C/ 125°F

RESULTS-	(<input type="checkbox"/> METRIC <input type="checkbox"/> IMPERIAL)
1 - CROSS TUBE - W.C. 63783	✓
1 - CROSS TUBE - W.C. 63984	✓
1 - CROSS TUBE - W.C. 63575	✓
1 - CROSS TUBE - W.C. 63524	✓
1 - CROSS TUBE - W.C. 64541	✓
1 - CROSS TUBE - W.C. 64547	✓
1 - REPLACEMENT ENGINE MOUNT - W.C. 63456 - D3667-1	✓
1 - ADD D3667-3	✓

Scope of Services
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Standard of Care
In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES	
CLIENT REPRESENTATIVE	PRINT: [Signature] SIGNATURE: [Signature]
TECHNICIAN (SIGNATURE):	REPORT REVIEWED BY:
NAME (PRINT):	NAME INITIALS
CGSB LEVEL 1 ST TECHNICIAN	CGSB LEVEL 2 ND TECHNICIAN
CGSB REG. No. 2006	CGSB REG. No.

WHITE - CLIENT COPY

CANARY - OFFICE COPY

PINK - TECHNICIAN COPY

GOLD - OFFICE COPY

Item	Qty -141	Qty -141B	Part Number	Description
1	X		D212-664-141	CROSSTUBE ASSEMBLY (205/212/412 HIGH FWD)
2		X	D212-664-141B	CROSSTUBE ASSEMBLY (214 HIGH FWD)
3	1	1	D6005-128	CROSSTUBE
4	2	2	D2893-1	SUPPORT
5	4	4	D3595-063-450	RUBBER CUSHION
6	4	4	MS21920-25	CLAMP (OR MS21920-26)
7	A/R	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

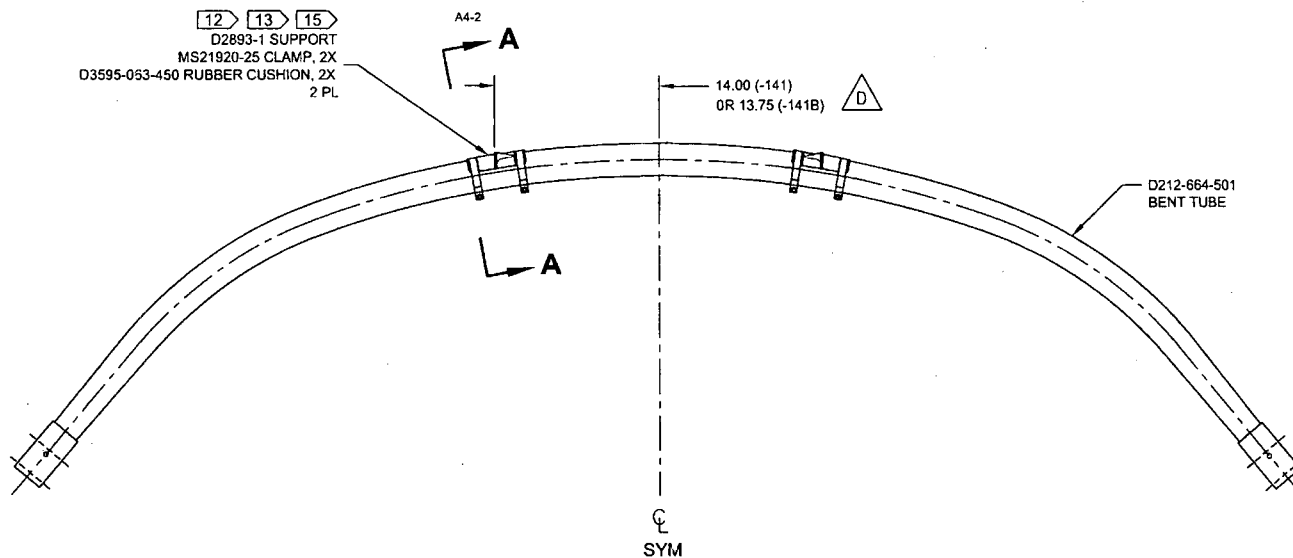
GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6005-128
FINISHED LENGTH = 126.514±0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D212-664-XXX" AND BATCH NUMBER ON INSIDE OF CUFF
USING VIBRATING STYLUS
- 7) WEIGHT: D212-664-141 = 33.6 lbs (PER IIN-D212-664)
D212-664-141B = 33.6 lbs (PER IIN-D212-664)
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART. BLEND OUT EDGE LONGITUDINALLY. TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 3 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS
6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2893-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF
D2893-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER
INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-25 CLAMPS (OR -26) WITH D3595-063-450 RUBBER CUSHIONS TO SECURE THE D2893-1
SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE
SUPPORT.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE
SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR
DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND
MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT
HAS NOT BOTTOMED-OUT AFTER TORQUING.

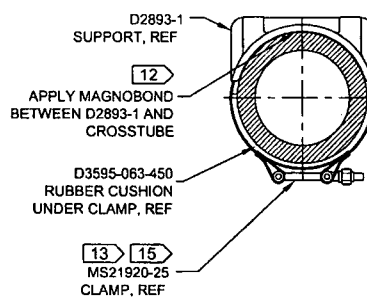
64541

RELEASED
2009-10-29
M

D	REFORMAT/REVISE GENERAL NOTES/PART LIST; REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS; ADD -141B (ZN B4-2, D4-2); REMOVED REF & ADD TOLERANCES (ZN B4-3, C6-3, C8-3 & B6-3); RELOCATED FLAG #6 PER PAR 08-046 (ZN A5-3); MOVED TURNING DETAIL & UPDATED TOLERANCE TO SHEET 4	RF	09.09.30
C	REMOVE -851 ABRASION STRIP; ADD MAGNOBOND 6398, CUSHION, REVERSE CLAMPS	PH	07.03.08
B	ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	PH	05.02.04
A	NEW ISSUE	PH	00.12.12
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	92	DRAWING NO.	REV. D
MFG. APPR.	10	D212-664-141	SHEET 1 OF 4
APPROVED	10	TITLE	SCALE
DE APPR.	10	CROSSTUBE ASSY (205/212/412 HI FWD)	NTS
DATE	09.09.30	COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMBINATION TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D212-664-141/-141B
ASSEMBLY DETAIL

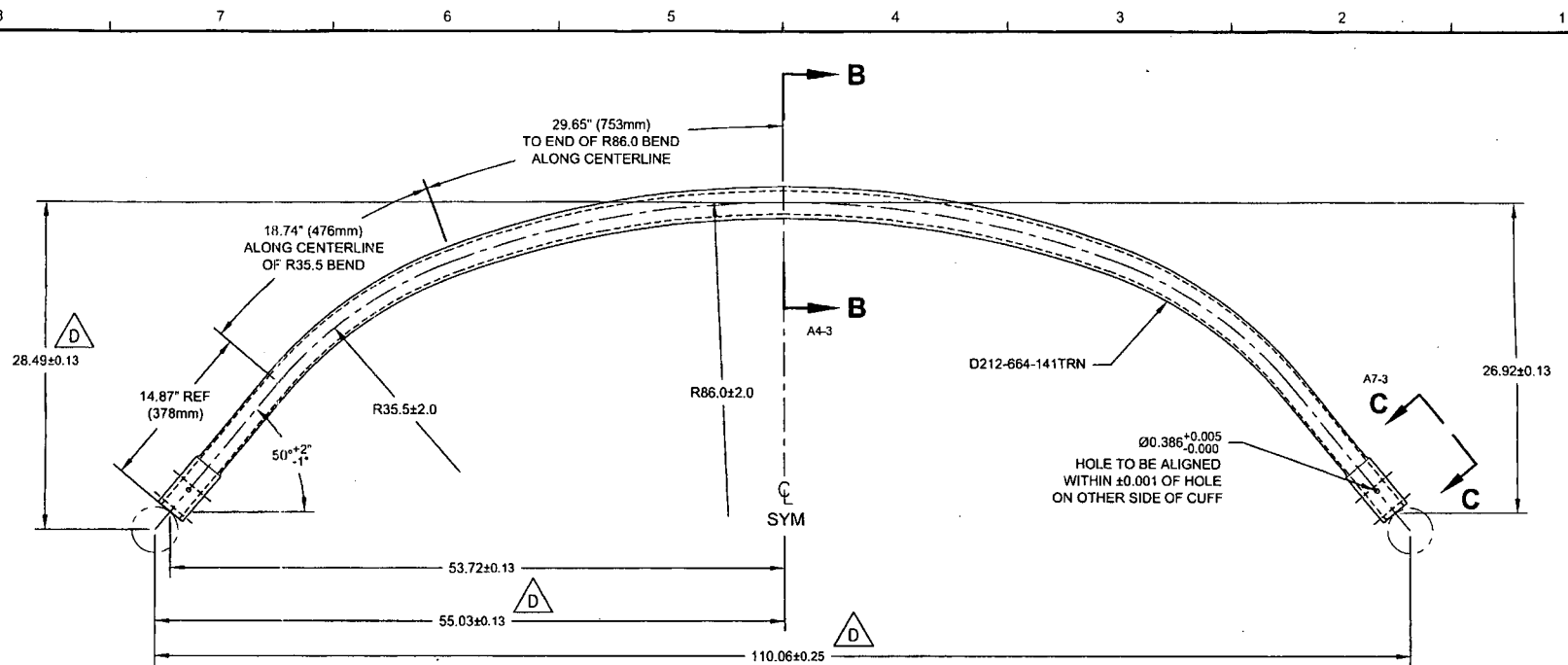


SECTION A-A
SCALE 4X

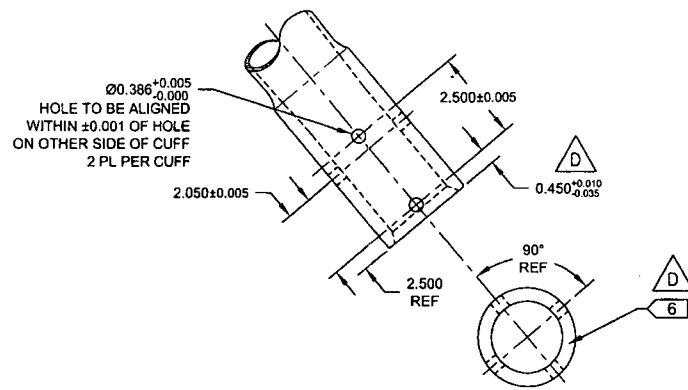
RELEASED
2009-10-29

64541

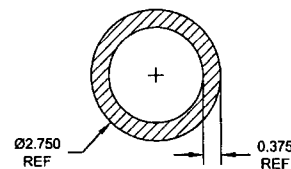
DESIGN	PH	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	Q	DRAWING NO.	REV. D
MFG. APPR.	SS	D212-664-141	SHEET 2 OF 4
APPROVED	10	TITLE	SCALE
DE APPR.	H	XTUBE ASS'Y (205/212/412 HI FWD)	HTG
DATE	09.09.30	<small>COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



D212-664-501
BENDING AND DRILLING DETAIL



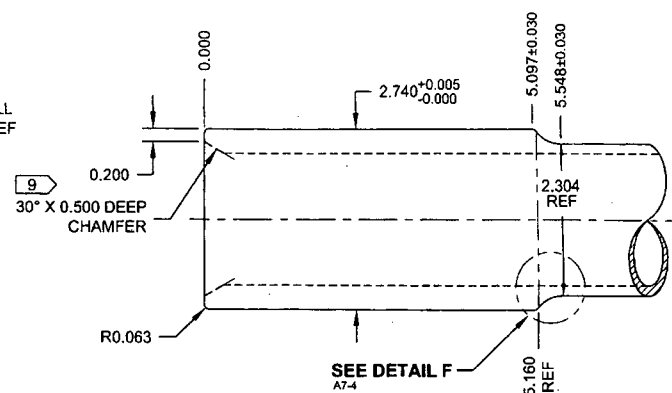
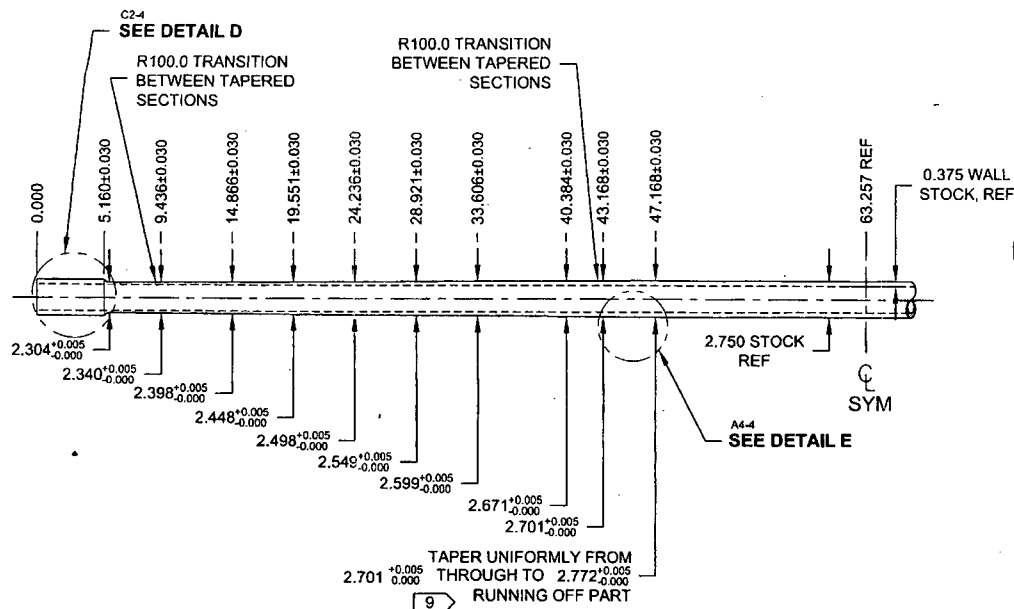
VIEW C-C: CUFF DETAIL
SCALE 3X



SECTION B-B
SCALE 4X

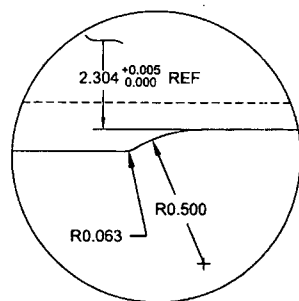
64541
RELEASED
2009-10-29
MP

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JP	DRAWING NO.	REV. D
MFG. APPR.	JP	D212-664-141	SHEET 3 OF 4
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	TUBE ASS'Y (205/212/412 HI FWD)	NTS
DATE	09.09.30	COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

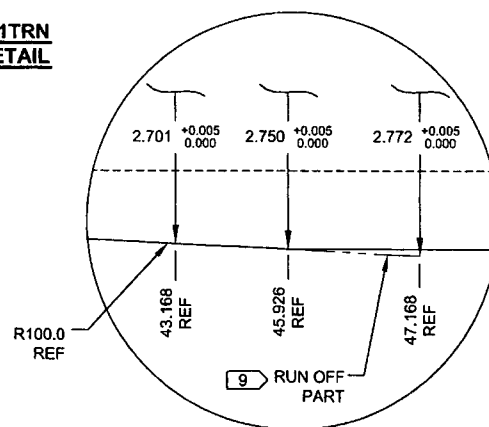


DETAIL D:
CROSSTUBE CUFF D6-4
SCALE 5X

D **D212-664-141TRN**
TURNING DETAIL



DETAIL F:
CUFF TRANSITION C2-4
SCALE 10X



DETAIL E:
TAPER RUN-OFF C2-4
NOT TO SCALE

64541

RELEASED
2009-10-29
AP

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	QD	DRAWING NO.	REV. D
MFG. APPR.	DS	D212-664-141	SHEET 4 OF 4
APPROVED	AP	TITLE	SCALE
DE APPR.	TH	XTUBE ASSY (205/212/412-PI FWD)	NTS
DATE	09.09.30	COPYRIGHT © 2000 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

Kim Johnston

From: L Lacelle <llacelle@dartaero.com>
Sent: Wednesday, January 12, 2011 9:04 AM
To: 'Kim Johnston'
Subject: FW: Crosstube corrosion from Expedition

That's for the 2 w/o's you rec'd yesterday

From: the.sheldons@sympatico.ca [mailto:the.sheldons@sympatico.ca] **On Behalf Of** Susanne Sheldon
Sent: January 12, 2011 8:22 AM
To: 'L Lacelle'
Cc: 'Stow, Dan'; swillems@dartaero.com; 'Marc Bellavance'; 'Jason Murdoch'; 'David Shepherd'; 'Bill Beckett'
Subject: RE: Crosstube corrosion from Expedition

I suggest keeping the same batch number and reference the re-work work order on the old work order for traceability
Susanne

From: L Lacelle [mailto:llacelle@dartaero.com]
Sent: January 11, 2011 8:47 AM
To: 'Susanne Sheldon'
Cc: 'Stow, Dan'; swillems@dartaero.com; 'Marc Bellavance'; 'Jason Murdoch'; 'David Shepherd'; 'Bill Beckett'
Subject: RE: Crosstube corrosion from Expedition
Importance: High

So these have been NDT'd and supports re-installed, all of this was done on w/o's, so my question is, do we send them out under the new B/N ? IF we do, this will screw up our costs of D212-664-101 & -201, as there was no cost entered in the RMA. Any suggestions?

LL

From: David Shepherd [mailto:dshepherd@dartaero.com]
Sent: January 5, 2011 5:21 PM
To: 'Jason Murdoch'; 'L Lacelle'; 'Marc Bellavance'
Cc: 'Stow, Dan'; 'Susanne Sheldon'; 'Mike Petsche'; swillems@dartaero.com; 'Bill Beckett'
Subject: RE: Crosstube corrosion from Expedition

Jason,

I would recommend that we NDT them.

David

From: Jason Murdoch [mailto:jmurdoch@dartaero.com]
Sent: Wednesday, January 05, 2011 1:59 PM
To: 'L Lacelle'; 'Marc Bellavance'
Cc: 'Stow, Dan'; 'Susanne Sheldon'; 'Mike Petsche'; 'David Shepherd'; swillems@dartaero.com; 'Bill Beckett'
Subject: RE: Crosstube corrosion from Expedition

Will these tubes be NDT'd before they ship back to the customer? I do not want DART being held responsible for any issues that might occur down the road.....ya mean?

Jason Murdoch
Quality Coordinator
jmurdoch@dartaero.com
DART Aerospace Ltd.
613-632-5200

From: L Lacelle [mailto:llacelle@dartaero.com]
Sent: Wednesday, January 05, 2011 1:55 PM
To: 'Marc Bellavance'
Cc: 'Jason Murdoch'; 'Stow, Dan'; 'Susanne Sheldon'; 'Mike Petsche'; 'David Shepherd'; swillems@dartaero.com; 'Bill Beckett'
Subject: RE: Crosstube corrosion from Expedition

With everyone gone for the last couple of weeks no one really touched them. They will get ground today, and alodined and we should be able to ship out by Friday.

LL

From: Marc Bellavance [mailto:mbellavance@dartaero.com]
Sent: January 5, 2011 1:49 PM
To: 'L Lacelle'
Cc: 'Jason Murdoch'; 'Stow, Dan'; 'Susanne Sheldon'; 'Mike Petsche'; 'David Shepherd'; swillems@dartaero.com; 'Bill Beckett'
Subject: RE: Crosstube corrosion from Expedition
Importance: High

Linda,

Where are we with this? Customer wants to know.

Marc Bellavance
Technical/Shop Support

DART aerospace Ltd.

Tel: 613-632-5200 Ext. 243

Cel: 613-676-0992

Fax: 613-632-9311

E-mail: mbellavance@dartaero.com

Web: www.dartaero.com

Product Documentation: Verify Revision Status/Download [HERE!](#)



Please consider your environmental responsibility before printing this e-mail

The information contained in this transmission is privileged and confidential and intended only for the use of the individual or entity to whom it is addressed. If you are not the intended recipient, you are hereby notified that any distribution, copying, disclosure or taking of any action in reliance on the contents of this transmission is strictly prohibited and review by any individual other than the intended recipient shall not constitute waiver of privilege. If you have received this transmission in error, please notify me immediately and delete the original transmission.

From: Bill Beckett [mailto:bbeckett@dartaero.com]
Sent: December 20, 2010 12:55 PM
To: 'Peggy McDonald'; swillems@dartaero.com; 'L Lacelle'
Cc: 'Marc Bellavance'; Jason Murdoch; 'Stow, Dan'; Susanne Sheldon; 'Mike Petsche'; 'David Shepherd'
Subject: RE: Crosstube corrosion from Expedition

Peggy – ok, this is fine.

Sian – no-charge on a CSR. Please indicate ship date (talk to LL).

Linda – pls prepare work order **NB – no priming!** Ensure interior is protected during etch and alodine.

Bill

From: Peggy McDonald [mailto:peggy@darths.com]

Sent: December 20, 2010 12:48 PM

To: Bill Beckett

Cc: Marc Bellavance

Subject: Crosstube corrosion from Expedition

Importance: High

Hi Bill,

I spoke with Expedition this morning about the crosstube corrosion issue.

To resolve the issue, I took your recommendation and offered the crosstube rework at no charge.
(removal of the surface corrosion, acid etch and alodine)

PLEASE NOTE : the customer will do their own priming right before paint.

These can be returned to them early in the new year.

I recommend a MISC no charge PO to be sent to DAS.

Freight will be on the DHS account.

Please advise how you would like DHS to proceed.

Peggy

PLEASE NOTE OUR NEW CORPORATE OFFICE ADDRESS: 4650 North Avenue, Oceanside, California 92056

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Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of DART Helicopter Services.

EXPEDITION HELICOPTERS

61001 Hwy 11 west, P.O. Box 160
Cochrane, ON P0L 1C0
Phone: 1-705-272-5755 Fax: 1-705-272-5752
guylain@expeditionhelicopters.com

Packing Slip	
Packing Slip No.	1285
Date	Dec 3, 2010
Created By	Suzanne
Type	RMA#RA110139 "SQ10210"
Currency	USD
Page 1/1	

RMA#RA110139 "SQ10210" #1285

To DART HELICOPTER SERVICES 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7 CANADA Tel: 613-632-3336, Fax: 613-632-4443 OR 800-556-4166	Order from 190 HWY 11 WEST PO.BOX 160 COCHRANE,ONTARIO P0L1C0 Tel: (705)-272-5755, Fax: (705)-272-5752
Ship to SAME 190 HWY 11 WEST, PO BOX 160 COCHRANE, ONTARIO P0L 1C0 Tel: (705) 272-5755, Fax: (705) 272-5752	Bill to SAME 190 HWY 11 WEST, PO BOX 160 COCHRANE, ONTARIO P0L 1C0 Tel: (705) 272-5755, Fax: (705) 272-5752

**** Work to be accomplished at this time ****

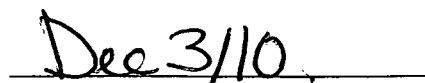
Please, perform RMA#RA110139 "SQ10210"

Parts description

Part Number	Description	Tracking #	Ser/Batch #	TTSN	TTSO	Reg	Est. Cost
D212-664-101	CROSSTUBE FWD	11898	B60522			C-FMQN	0.00
Defect	TO BE SENT TO DART HELICOPTERS FOR WARRANTY EVALUATION AS PER JEAN KERR RETURN AUTHORIZATION #RA110139 "SQ10210"						

Part Number	Description	Tracking #	Ser/Batch #	TTSN	TTSO	Reg	Est. Cost
D212-664-201	CROSSTUBE AFT	11899	B60450			C-FMQN	0.00
Defect	TO BE SENT TO DART HELICOPTERS FOR WARRANTY EVALUATION AS PER JEAN KERR RETURN AUTHORIZATION #RA110139 "SQ10210"						


Signature


Date



4650 North Avenue, Oceanside, CA 92056
Tel: 1-760-295-6094 Fax: 1-760-295-9117
E-mail: sales@darths.com

RETURN AUTHORIZATION

Date: Dec. 03/10
To: Expedition Helicopters Inc.
Attention: Guylain Tremblay
E-Mail: guylain@expeditionhelicopters.com
From: Jean

Dear Guylain

Please find below the instructions to return the **D212-664-101/201** ordered on your Purchase Order **2427**.

1. Your Return Authorization Number is **RA110139**. Please make reference to this number on all paperwork. Items must still be in original packaging. Please label the crosstubes with "**SQ10210**".
2. The Original Release Certificate, STC's, Installation Instructions, Maintenance Manual Supplement, Flight Manual Supplement, and packing slips must accompany the shipment.
3. Please mark the shipping labels to:
Dart Aerospace,
1270 Aberdeen Street,
Hawkesbury, Ontario.
Canada K6A 1K7
Tel.: 1-613-632-5200
4. Brad from Journey Freight (tel 514-447-0242, ext. 3242) will contact you for the pick up of the crosstubes. This Return Authorization expires in 30 days. The Quality Control at Dart Aerospace will evaluate the crosstubes and will notify you once completed.

If you require additional information, please feel free to contact us. **DART HELICOPTER SERVICES, LLC** is always pleased to assist you with your helicopter needs.

Best Regards,

Jean Kerr
Sales Support
DART HELICOPTER SERVICES, LLC



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 5200
Fax: 613 632 5246

Packing Slip

Packing Slip Number : INV102995

Customer Purchase Order ID : 7601/2427

Sales Order ID : SO103029

Ship Date : 8/24/2010 12:58:00 PM

Page Number : 2

Bill To : CU-DAR001

DART HELICOPTERS SERVICES LLC.
1736 ORD WAY
OCEANSIDE, CA 92056
US

Ship To :

EXPEDITION HELICOPTERS, INC.
190 HWY 11 WEST
COCHRANE, ON P0L 1C0
CA

Buyer:

Contact Name: Suzanne Arsenaault

Contact Phone: 705 272 5755

Contact Phone Ext.:

Order Date: 8/24/2010 12:46:25 PM
Manitoulin Ground Coll

FOB: Territory: CA Central

Ship From: MAIN WAREHOUSE
DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7 CANADA

Bill of Lading :

Pallets 0
Cartons 0
Weight 0

Ship From Phone: 613 632 5200

Line /	Item ID /	Item Name	Harmonize Code:	Req. Date	Req. Qty	Ship Qty	Backordered Qty
Cust PO Line Nbr	Cust Item ID						
4	D205-634-011		8803.20	8/24/2010	1.0000	1.0000	0.0000
4	Skidtube				Each	Each	

Special
Instructions:

Lot Number
60690

Lot Trans Qty
1.0000

As per FAA STC requirement, this is written evidence that Dart Aerospace Ltd. gives the above Ship-to permission to use the STC(s) for the above shipped part(s) to alter the product listed in the STC(s).

Special
Instructions for
Sales Order:



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 5200
Fax: 613 632 5246

Packing Slip

Packing Slip Number : INV102995
Customer Purchase Order ID : 7601/2427
Sales Order ID : SO103029
Ship Date : 8/24/2010 12:58:00 PM
Page Number : 1

Bill To : CU-DAR001

DART HELICOPTERS SERVICES LLC.
1736 ORD WAY
OCEANSIDE, CA 92056
US

Ship To :

EXPEDITION HELICOPTERS, INC.
190 HWY 11 WEST
COCHRANE, ON P0L 1C0
CA

Buyer:

Contact Name: Suzanne Arseneault
Contact Phone: 705 272 5755
Contact Phone Ext.:

Order Date: 8/24/2010 12:46:25 PM
Manitoulin Ground Coll

FOB: Origin
Territory: CA Central

Ship From: MAIN WAREHOUSE

Bill of Lading :

Pallets 0
Cartons 0
Weight 0

DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7 CANADA

Ship From Phone: 613 632 5200

Line /	Item ID /	Item Name	Harmonize Code:	Req. Date	Req. Qty	Ship Qty	Backordered Qty
Cust PO Line Nbr	Cust Item ID						

1	D212-664-101		8803.20	8/24/2010	1.0000	1.0000	0.0000
1	Crosstube Fwd				Each	Each	

Special Instructions:	<u>Lot Number</u>	<u>Lot Trans Qty</u>
	60522	1.0000

2	D212-664-201		8803.20	8/24/2010	1.0000	1.0000	0.0000
2	Crosstube Aft				Each	Each	

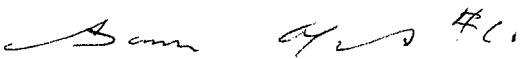
Special Instructions:	<u>Lot Number</u>	<u>Lot Trans Qty</u>
	60450	1.0000

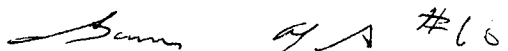
3	D205-634-011		8803.20	8/24/2010	1.0000	1.0000	0.0000
3	Skidtube				Each	Each	

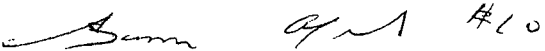
Special Instructions:	<u>Lot Number</u>	<u>Lot Trans Qty</u>
	59280	1.0000


As per FAA STC requirement, this is written evidence that Dart Aerospace Ltd. gives the above Ship-to permission to use the STC(s) for the above shipped part(s) to alter the product listed in the STC(s).

Special Instructions for Sales Order:

1. Approving Civil Aviation Authority/Country: Transport Canada		2. AUTHORIZED RELEASE CERTIFICATE FORM ONE			3. Form Tracking No: SO103029-2	
4. Organizations Name and Address:		DART AEROSPACE LTD 1270 Aberdeen Street Hawkesbury, ON, K6A 1K7 Canada			Tel: 1 613 632 5200 Fax: 1 613 632 5246 www.dartaero.com	
5. Work Order/Contract/Invoice 7601/2427						
6. Item:	7. Description:	8. Part No:	9. Quantity:	10. Serial/Batch No:	11. Status/Work:	
1	Crosstube Aft	D212-664-201	1	B60450	New	
12. Remarks: TC STC SH01-9 Issue 3, FAA STC SR01298NY 09/01/08, EASA STC EASA.IM.R.S.01304 07/03/06						
13a. Certifies that the items identified above were manufactured in conformity to:			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulations specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 has been performed in compliance with the Canadian Aviation Regulations.			
<input checked="" type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 12.						
13b. Signature: 		13c. Approved Organization Number: 9-89		14b. Signature: N/A		14c. Approved Organization Number: N/A
13d. Name: Suzanne Bedford		13e. Date (dd/mm/yyyy): 24/Aug/2010		14d. Name: N/A		14e. Date (dd/mm/yyyy): N/A
(Previously form 24-0078)						
Important: See notes						
<p>This certificate does not constitute authority to install.</p> <p>Installer Responsibilities</p> <p>Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.</p> <p>Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.</p>						

1. Approving Civil Aviation Authority/Country: Transport Canada		2. AUTHORIZED RELEASE CERTIFICATE FORM ONE			3. Form Tracking No: SO103029-1	
4. Organizations Name and Address:		DART AEROSPACE LTD 1270 Aberdeen Street Hawkesbury, ON, K6A 1K7 Canada			Tel: 1 613 632 5200 Fax: 1 613 632 5246 www.dartaero.com	
		5. Work Order/Contract/Invoice 7601/2427				
6. Item:	7. Description:	8. Part No:	9. Quantity:	10. Serial/Batch No:	11. Status/Work:	
1	Crosstube Fwd	D212-664-101	1	B60522	New	
12. Remarks: TC STC SH01-9 Issue 3, FAA STC SR01298NY 09/01/08, EASA STC EASA.IM.R.S.01304 07/03/06						
13a. Certifies that the items identified above were manufactured in conformity to:			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulations specified in Block 12			
<input checked="" type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 12.			Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 has been performed in compliance with the Canadian Aviation Regulations.			
13b. Signature:		13c. Approved Organization Number:	14b. Signature:		14c. Approved Organization Number:	
		9-89	N/A		N/A	
13d. Name:		13e. Date (dd/mm/yyyy):	14d. Name:		14e. Date (dd/mm/yyyy):	
Suzanne Bedford		24/Aug/2010	N/A		N/A	
(Previously form 24-0078)						
Important: See notes						
This certificate does not constitute authority to install.						
Installer Responsibilities Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified. Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.						

1. Approving Civil Aviation Authority/Country: Transport Canada		2. AUTHORIZED RELEASE CERTIFICATE FORM ONE			3. Form Tracking No: SO103029-4	
4. Organizations Name and Address: DART AEROSPACE LTD 1270 Aberdeen Street Hawkesbury, ON, K6A 1K7 Canada				Tel: 1 613 632 5200 Fax: 1 613 632 5246 www.dartaero.com		
5. Work Order/Contract/Invoice 7601/2427						
6. Item:	7. Description:	8. Part No:	9. Quantity:	10. Serial/Batch No:	11. Status/Work:	
1	Skidtube	D205-634-011	1	B60690	New	
12. Remarks: TC STC SH96-88 Issue 3, FAA STC SR00563NY 08/08/11, EASA STC EASA.IM.R.S.01303 07/06/27, JCAB JAPAN STC-55-1-TYO 99/11/24						
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulations specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 has been performed in compliance with the Canadian Aviation Regulations.			
13b. Signature: 		13c. Approved Organization Number: 9-89		14b. Signature: N/A		
13d. Name: Suzanne Bedford		13e. Date (dd/mm/yyyy): 24/Aug/2010		14c. Approved Organization Number: N/A		
				14d. Name: N/A		
				14e. Date (dd/mm/yyyy): N/A		
(Previously form 24-0078)						
Important: See notes						
<p>This certificate does not constitute authority to install.</p> <p>Installer Responsibilities</p> <p>Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.</p> <p>Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.</p>						

1. Approving Civil Aviation Authority/Country: Transport Canada		2. AUTHORIZED RELEASE CERTIFICATE FORM ONE			3. Form Tracking No: SO103029-3		
4. Organizations Name and Address: DART AEROSPACE LTD 1270 Aberdeen Street Hawkesbury, ON, K6A 1K7 Canada		Tel: 1 613 632 5200 Fax: 1 613 632 5246 www.dartaero.com			5. Work Order/Contract/Invoice 7601/2427		
6. Item:	7. Description:	8. Part No:	9. Quantity:	10. Serial/Batch No:	11. Status/Work:		
1	Skidtube	D205-634-011	1	B59280	New		
12. Remarks: TC STC SH96-88 Issue 3, FAA STC SR00563NY 08/08/11, EASA STC EASA.IM.R.S.01303 07/06/27, JCAB JAPAN STC-55-1-TYO 99/11/24							
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulations specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 has been performed in compliance with the Canadian Aviation Regulations.				
13b. Signature: 		13c. Approved Organization Number: 9-89		14b. Signature: N/A		14c. Approved Organization Number: N/A	
13d. Name: Suzanne Bedford		13e. Date (dd/mm/yyyy): 24/Aug/2010		14d. Name: N/A		14e. Date (dd/mm/yyyy): N/A	
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Important: See notes							



File D

L Lacelle

From: David Shepherd [dshepherd@dartaero.com]
Sent: January 5, 2011 5:21 PM
To: 'Jason Murdoch'; 'L Lacelle'; 'Marc Bellavance'
Cc: 'Stow, Dan'; 'Susanne Sheldon'; 'Mike Petsche'; swillems@dartaero.com; 'Bill Beckett'
Subject: RE: Crosstube corrosion from Expedition

Jason,

I would recommend that we NDT them.

David

From: Jason Murdoch [mailto:jmurdoch@dartaero.com]
Sent: Wednesday, January 05, 2011 1:59 PM
To: 'L Lacelle'; 'Marc Bellavance'
Cc: 'Stow, Dan'; 'Susanne Sheldon'; 'Mike Petsche'; 'David Shepherd'; swillems@dartaero.com; 'Bill Beckett'
Subject: RE: Crosstube corrosion from Expedition

Will these tubes be NDT'd before they ship back to the customer? I do not want DART being held responsible for any issues that might occur down the road.....ya mean?

Jason Murdoch
Quality Coordinator
jmurdoch@dartaero.com
DART Aerospace Ltd.
613-632-5200

How to ship
New B/W?

From: L Lacelle [mailto:llacelle@dartaero.com]
Sent: Wednesday, January 05, 2011 1:55 PM
To: 'Marc Bellavance'
Cc: 'Jason Murdoch'; 'Stow, Dan'; 'Susanne Sheldon'; 'Mike Petsche'; 'David Shepherd'; swillems@dartaero.com; 'Bill Beckett'
Subject: RE: Crosstube corrosion from Expedition

With everyone gone for the last couple of weeks no one really touched them. They will get ground today, and alodined and we should be able to ship out by Friday.

LL

From: Marc Bellavance [mailto:mbellavance@dartaero.com]
Sent: January 5, 2011 1:49 PM
To: 'L Lacelle'
Cc: 'Jason Murdoch'; 'Stow, Dan'; 'Susanne Sheldon'; 'Mike Petsche'; 'David Shepherd'; swillems@dartaero.com; 'Bill Beckett'
Subject: RE: Crosstube corrosion from Expedition
Importance: High

Linda,

1/06/11

Where are we with this? Customer wants to know.

Marc Bellavance

Technical/Shop Support

DART aerospace Ltd.

Tel: 613-632-5200 Ext. 243

Cel: 613-676-0992

Fax: 613-632-9311

E-mail: mbellavance@dartaero.com

Web: www.dartaero.com

Product Documentation: Verify Revision Status/Download [HERE!](#)



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From: Bill Beckett [<mailto:bbeckett@dartaero.com>]

Sent: December 20, 2010 12:55 PM

To: 'Peggy McDonald'; swillems@dartaero.com; 'L Lacelle'

Cc: 'Marc Bellavance'; Jason Murdoch; 'Stow, Dan'; Susanne Sheldon; 'Mike Petsche'; 'David Shepherd'

Subject: RE: Crosstube corrosion from Expedition

Peggy – ok, this is fine.

Sian – no-charge on a CSR. Please indicate ship date (talk to LL).

Linda – pls prepare work order **NB – no priming!** Ensure interior is protected during etch and alodine.

Bill

From: Peggy McDonald [<mailto:peggy@darths.com>]

Sent: December 20, 2010 12:48 PM

To: Bill Beckett

Cc: Marc Bellavance

Subject: Crosstube corrosion from Expedition

Importance: High

Hi Bill,

I spoke with Expedition this morning about the crosstube corrosion issue.

To resolve the issue, I took your recommendation and offered the crosstube rework at no charge.
(removal of the surface corrosion, acid etch and alodine)

PLEASE NOTE : the customer will do their own priming right before paint.

These can be returned to them early in the new year.

I recommend a MISC no charge PO to be sent to DAS.

Freight will be on the DHS account.

Please advise how you would like DHS to proceed.

1/06/11

Peggy

PLEASE NOTE OUR NEW CORPORATE OFFICE ADDRESS: 4650 North Avenue, Oceanside, California 92056

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1/06/11

List Lots

January 5, 2011 3:20:21 PM

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Criteria : All Items All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Type Code	Comments
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D212-664-201CM	Main Warehouse	60450	12/14/10	1.0000			
Crosstube, customer mat'l	RMAInspect						

Total: 1.0000

64547

RA 110731

List Lots

January 5, 2011 3:20:06 PM

Page 1 of 1

Criteria : All Items All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt Lot Code	Type Code	Comments
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D212-664-101CM	Main Warehouse	60522	12/14/10	1.0000			
Crosstube, customer mat'l	RMAInspect						

Total: 1.0000

64541

* Customer Property *

Do Not Damage

- 24116134 For investigation
to Washington

- NCR 10-380
5010210

1/10/2002

* Customer Property *

Do Not Damage

24116134 For investigation

to Washington

- NCR 10-380
5010210

1/10/2002